

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
19 May 2005 (19.05.2005)

PCT

(10) International Publication Number
WO 2005/046093 A1

(51) International Patent Classification⁷: **H04B 10/155**,
10/18

(21) International Application Number:
PCT/GB2004/004623

(22) International Filing Date:
2 November 2004 (02.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0325584.1 3 November 2003 (03.11.2003) GB

(71) Applicant (for all designated States except US):
ELONICS LIMITED [GB/GB]; 5 Craiglockhart View,
Edinburgh EH14 1BX (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **SRODZINSKI, David**
[GB/GB]; Elonics Limited, 5 Craiglockhart View, Edin-
burgh EH14 1BX (GB).

(74) Agent: **KENNEDYS PATENT AGENCY LIMITED**;
Floor 5, Queens House, 29 St. Vincent Place, Glasgow G1
2DT (GB).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

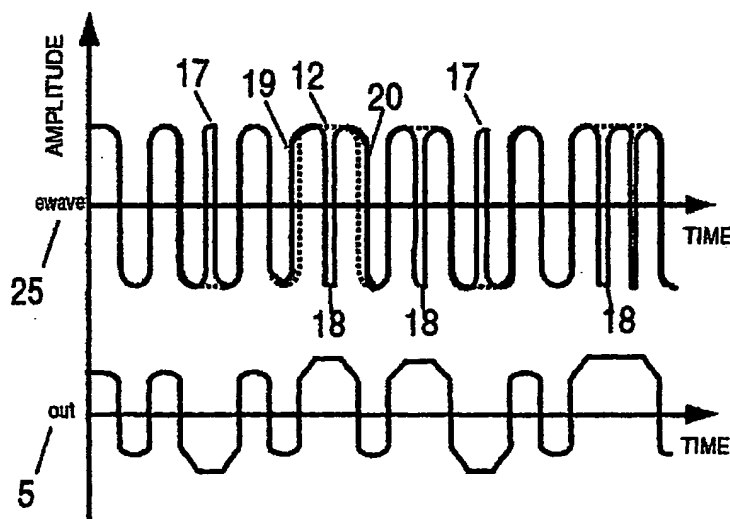
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR ADAPTING AN INFORMATION CARRYING SIGNAL



(57) Abstract: A method and apparatus for adapting an information carrying signal (25, 26) is described. The method involves the controllable introducing of sub-pulses (17, 18, 19 and 20) to the data pulses of an information carrying signal (25) which effectively allows the controllable removal of energy from the information carrying signal (25). The method and apparatus can be readily employed within a transmitter (2) of a communication system so as to overcome signal impairment effects within the system or to act as a frequency bandpass filter. The invention has particular application as an equalisation element in the field of fibre optic communications networks so as to counteract dispersion and other complex signal impairments

WO 2005/046093 A1

WO 2005/046093 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.